fingerprint and thumbprint area by pressing the associated button next to the appropriate finger. For example, the user has pressed button **732**, indicating that he/she desires to change the functionality of the second finger (i.e., fingerprint area **230**). In response, the OS displays drop-down list **740** of pre-defined functions stored in memory. The user has selected open function **742** where, in response, the OS displays another drop-down list **746**. The user selected a double click **744** of the second finger to invoke the open function. The user then presses save button **748** to save the entries in the user file. In response, the main menu **600** shown in FIG. **6** appears. However, one skilled in the art readily recognizes that other changes in finger behavior and fingerprint area functionality may be made without departing from the scope and spirit of this preferred embodiment.

Returning to FIG. **6**, if the user selects define pointer button **630**, a "define pointer" menu appears that allows the user to define/redefine the shape, sensitivity, and position of the pointer on the virtual pointing device. Referring to define pointer menu **760** in FIG. **7**, the user has a number of choices regarding the pointer. For example, the user can select a small, medium or large arrow, and/or a blinking arrow. The user can also select small or large pointer sensitivity, and the position of the pointer with respect to the virtual pointing device. For example, the pointer may be positioned over the third finger (default position), over the first finger, or below the palm. However, one skilled in the art readily recognizes that numerous changes in pointer behavior may be made without departing from the scope and spirit of this preferred embodiment. The user presses save button **762** to save the entries and, in response, the main menu **600** appears.

Finally, in FIG. **6**, the user has the option of saving and exiting by pressing save/exit button **635**, or cancelling all changes and returning to the default virtual pointing device by pressing cancel button **615**.

Referring to FIG. **4**, in a second embodiment, the OS displays pre-determined, standard size fingerprint areas **415**, **420**, **430**, **435** and **440** and pointer **450** as a nonactivated (also referred to as "obviously hibernated") virtual pointing device. The fingerprint areas of the virtual pointing device are translucent such that object icons can be seen through them. To activate the virtual pointing device, the user places one or more fingers over a fingerprint area **415**, **420**, **430**, **435** or **440** on touchscreen **400**.

Alternatively, when the OS detects a sound pattern (or heat, pressure, etc.) over one or more of the translucent fingerprints areas **420**, **430**, **435** and **440**, the OS activates only that area of virtual pointing device. The OS assigns a default function (e.g., default function displayed above each fingerprint area) to each fingerprint area having a finger placed over it. However, the fingerprint areas not having a finger placed over them will not be activated and, as such, will not have the default function assigned to them until they are activated. Each fingerprint area may be activated at any time.

As the user slides his/her fingers over touchscreen **400**, the OS detects the touchscreen pixel coordinates under the user's moving fingers and, in response, continuously re-defines the "activated" areas of the virtual pointing device to be the touchscreen areas under the fingers. Therefore, the virtual pointing device moves with and according to the movement of the user's fingers. However, while not all of the fingerprint areas may be activated at once, all fingerprint areas move together as one object.

The OS positions pointer **450** near the fingerprint area **420** such that pointer **450** moves in accordance with movement

of the virtual pointing device. Therefore, the user could, for example, move the virtual pointing device such that pointer **450** is positioned over a desired object icon. Alternatively, the user could merely lift his hand and place it at a desired location, whereby the OS would re-create the virtual pointing device under the user's fingers at the new location. Additionally, any objects or text selected by the virtual pointing device at the time the hand was lifted would also be re-drawn at the new location.

In this example, the user has placed his/her first finger over fingerprint area **420** to activate that area of the virtual pointing device. If the user desires to resize the distance between the fingerprint areas of the virtual pointing device, the user merely places a separate finger, one by one, over each displayed fingerprint area (thereby activating them) and then slides each finger outward or inward, as appropriate, to customize the shape/size of the virtual pointing device. In this manner, the user customizes the shape/size of the virtual pointing device to the shape/size of his/her fingers. However, the user must actively customize the shape/size of the virtual pointing device each time he/she uses it.

Once the user positions pointer **450** over a desired object icon **422**, the user could, for example, single click his first finger over fingerprint area **420** to transfer focus to object icon **422**. However, only generic functions (or previously established functions) can be used for this embodiment.

While the invention has been shown and described with reference to a particular embodiment thereof, it will be understood by those skilled in the art that the foregoing and other changes in form and detail may be made therein without departing from the spirit and scope of the invention, only defined by the appended claims.

What is claimed is:

1. A method for directing a computer system, having at least a processor, memory, and touchscreen, to create a virtual pointing device, comprising the steps of:

   (a) detecting a hand placed on the touchscreen;

   (b) designating at least one area of the touchscreen under at least a portion of the hand as the virtual pointing device, wherein said at least a portion of the hand is in substantial contact with said at least one area;

   (c) in response to movement of the portion of the hand across the touchscreen while the portion of the hand remains in substantial contact with the touchscreen, moving the area in substantial accordance with the movement of the portion of the hand, wherein the virtual pointing device is moved in substantial accordance with the movement of the portion of the hand, and further wherein said portion of said hand remains in substantial contact with said at least one area during the movement of the portion of the hand, said at least one area and said virtual pointing device being only displayed on said touchscreen which is in contact with said portion of said hand;

   (d) positioning a pointer on the touchscreen, wherein said pointer is separate from said virtual pointing device and is disposed outside said at least one area, such that movement of the portion of the hand on the touchscreen in a first direction causes the pointer to move in the first direction; and

   (e) in response to activating the area by at least a second portion of the hand, executing at least one command on an object or text positioned substantially under the pointer.

2. The method according to claim **1** wherein step (e) comprises the following steps: